

REMARKS

Applicant respectfully requests reconsideration of this application. Claims 37-58 are currently pending.

Claims 38 and 49-54 have been amended. No claims have been cancelled. No claims have been added.

Therefore, claims 37-58 are now presented for examination.

Claim Amendments

The only claim amendments provided here are claim amendments to claim 38 and 49-54 to correct minor grammatical errors in the claims. Applicant requests entry of these amendments to correct these errors.

Claim Rejection under 35 U.S.C. §103

Williams et al. in view of Lee et al.

The Examiner rejected claims 37-57 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2002/0087723 of Williams et al., (“*Williams*”) in view of U.S. Patent No. 6,859,435 of Lee et al., (“*Lee*”).

For convenience, claim 37 is again provided here:

37. A method comprising:
receiving a plurality of Ethernet frames for transmission at a device, the device including an enhanced network interface;
receiving a control message from a first Ethernet switch, the first Ethernet switch including the enhanced network interface, the control message identifying a priority level from among a plurality of priority levels for transmissions to the first Ethernet switch;

identifying one or more of the plurality of Ethernet frames to be transmitted to the first network switch and determining the identified priority level for the first Ethernet switch; and based on the identified priority level, pausing transmission to the first Ethernet switch of Ethernet frames that are associated with priority levels that are lower than the identified priority level and allowing transmission to the first Ethernet switch of Ethernet frames that are at or above the identified priority level.

In the previous Office Action, claims 37, 41-43, 47-49 and 53-54 were rejected under 35 U.S.C. 102(e) as being allegedly disclosed by *Lee*, while claims 38-40, 44-46 and 50-52 were rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over *Lee* in view of *Williams*. In the current Final Office Action, claims 37-57 are rejected as being allegedly unpatentable over *Williams* in view of *Lee*.

Claim 37 provides for receiving a control message from a first Ethernet switch, the first Ethernet switch including an enhanced network interface, the control message identifying a priority level from among a plurality of priority levels for transmissions to the first Ethernet switch. In response to the prior Office Action, Applicant has argued that, among other differences, neither *Lee* nor *Williams* provides for identifying one or more of a plurality of Ethernet frames that are to be transmitted to a first network switch, and determining the identified priority level for the first Ethernet switch, which was contained in the control message from the Ethernet switch. The claim then provides for, based on the identified priority level, pausing transmission to the first Ethernet switch of Ethernet frames that are associated with priority levels that are lower than the identified priority level and allowing transmission to the first Ethernet switch of Ethernet frames that are at or above the identified priority level. It is emphasized that this claim regards a

priority level for transmissions to the Ethernet switch, with the priority level being received in the control message from the Ethernet switch.

In reply, the Final Office Action indicates the following:

The applicant states that Williams and Lee do not disclose the claimed invention. In reply, Williams discloses a method and system for monitoring traffic and identifying what priority causes a congestion by comparing threshold with the use of queues. Then, the switch will generate a pause includes priority level. The interface use priority level to control transmission of the frame from one place to another. Lee disclose a method and system for monitoring traffic and identifying what priority causes a congestion by comparing threshold with the use of queues. Then, the switch will generate a pause includes priority level and time as stated in the previous office action and this final office action.

Applicant respectfully submits that this reply does not address the point of the arguments that were raised in the last response. The reply to arguments makes statements regarding the cited references that simply are not relevant to the claim elements at issue. Whether or not the references in fact disclose a method and system for monitoring traffic and identifying what priority causes congestion by comparing a threshold with the use of queues, whether the disclosed switch generates a pause that includes a priority level, and whether the disclosed interface uses a priority level to control transmission of the frame from one place to another would not be relevant here – these are not the claim elements at issue. Even if the statement of the Final Office Action is correct, this would not be sufficient to teach or suggest the elements of the claim with regard to a control message from an Ethernet switch, the determination of the priority level for the Ethernet switch, and the pausing of transmissions to the Ethernet switch based on the priority. Rather,

what the Final Office Action has described is a system to generally address congestion of transmission, without regard to the elements of the claim regarding the message from the Ethernet switch and the control of transmissions to the Ethernet switch based on the priority level received in the message from the Ethernet switch.

As indicated in the last response, *Williams* includes discussion of “[a] network device that controls the communication of data frames between stations receive[d] data frames having different priorities.” (*Williams*, abstract). *Williams* further discloses that the network device includes “output control queues . . . [that] include multiple priority queues for frames having different level of priority.” (*Williams*, col. 5, lines 34-38). *Williams* further modifies the standard MAC control to include a “priority field . . . to advantageously enable . . . selectively suspend[ing] data transmissions.” (col. 7, lines 57-58).

However, the discussion of any operations for sending data is limited, and does not teach or suggest the elements of claim 37. For example, Figure 5 of *Williams* includes designated stations receiving the MAC control pause frame and identifying the priority information (element 560), and stations stopping transmitting data frames of the designated priority for the period of time that is defined in the parameters field. (See *Williams*, ¶0048) However, this is not the type of priority and operation described in claim 37. The system described in the reference is not discussing a priority for an Ethernet switch that has been provided in a control message from the Ethernet switch.

As was described in the last response, *Lee* regards the prevention of deadlocks and livelocks in lossless, backpressured packet networks. Within the *Lee* reference, there is discussion regarding priority levels that are assigned to packets. *Lee* does address the

monitoring of priority levels of arriving and departing packets. (*Lee*, col. 5, line 62, to col. 6, line 8). In addition, *Lee* discusses feedback sent from receiving node to a sending node, where the feedback represents the lowest priority level of packets that the receiving node can accept without violating any buffer threshold restraints.

However, this again does not teach or suggest the elements of claim argued here. The *Lee* reference describes the establishment and updating of priorities. However, the discussion of priority determination relates to the priority level that applies to each data packet, NOT a priority level received in a control message from an Ethernet switch that relates to a particular Ethernet switch that is receiving the data packet. As was mentioned in the last response, *Lee* addresses the transmission of data between devices, but the discussion is very limited, and does not address the issues contained in the claims. For example, Figure 9 of the reference provides only two steps for send functions at a Node X_i , and describes the operation as follows:

FIG. 9 is a flow chart illustrating the send functions performed at a sending node X_i . In step 901, a determination is made as to which packets are eligible for transmission over link 1, by determining if the priority level for a packet is greater or equal to the feedback level, or $\lambda_p \geq f_i$, as in Equation 1. Any arbitrary scheduling algorithm S_i is then used to select the next packet for transmission from among those that are eligible, in step 903, whereupon the process of FIG. 9 returns and repeats step 901.

(*Lee*, col. 13, lines 32-40) (*Emphasis added*) Thus, the reference refers only to determinations regarding the eligibility of packets for transmission, which is a comparison of a priority of a packet to a feedback level, but does NOT address operations to identify which data packets are destined to a device, or to determine a priority level that would relate to such a device, as in claim 37.

It is again submitted that neither *Williams* nor *Lee* teaches or suggests the claims elements described below, and thus the references, alone or in combination, do not teach or suggest the elements of claim 37.

It is submitted that the arguments presented above with regard to claim 37 are also applicable to independent claims 43 and 49. The remaining claims, while having other differences with the cited references, and dependent claims and are allowable as being dependent on the allowable base claims

Further, it is noted that new claim 57 provides that the system further comprises a link to a second Ethernet switch that is not compatible with the enhanced network interface, and provides that the system is to operate in conjunction with the second Ethernet switch without regard to the priority level of Ethernet frames. The Final Office Action cites another link for this element, which is apparently a fiber link in Figure 5 of *Lee*. Applicant is unclear to what in Figures 5a and 5b the Final Office Action is referring. Nevertheless, the claim indicates that the second Ethernet switch is not compatible with the enhanced network interface, and that the system operates in conjunction with the second Ethernet switch without regard to the priority of Ethernet frames, and the mere identification of a different kind of cable would not show these claim elements.

Claim Rejection under 35 U.S.C. §103

Williams et al. in view of Lee et al. of Krishna

The Examiner rejected claim 58 under 35 U.S.C. §103(a) as being unpatentable over *Williams* in view of *Lee* as applied to claim 43 further in view of U.S. Patent No. 6,981,054 of Krishna (“*Krishna*”).

Claim 58 is a dependent claim and thus, while having other differences with the prior art, is allowable as being dependent on the allowable base claim.

Williams and *Lee* have been discussed above. While cited for other purposes, the *Krishna* reference does not teach or suggest the claim elements shown above to be missing from *Williams* and *Lee*. Similarly to *Williams* and *Lee*, the *Krishna* reference regards flow control based on priority traffic. As describes, it appears that a network switch includes network switch ports, and each port filter, upon detecting a user-selected attribute in a received frame, sends a signal to a switching module indicating the determined presence of the user-selected attribute. This may include whether the data packet has a prescribed priority value. The network switch further includes a flow control module that determines which network switch ports output a flow control frame based on the determined depletion of network switch resources and based on the corresponding priority value of the network traffic on each network switch port.

As with *Williams* and *Lee*, it appears that *Krishna* does not teach or suggest receiving a control message from a first Ethernet switch, the control message identifying a priority level from among a plurality of priority levels for transmissions to the first Ethernet switch. The reference further does not appear to provide for identifying one or more of a plurality of Ethernet frames that are to be transmitted to a first network switch, and determining the identified priority level for the first Ethernet switch, or, based on the identified priority level, pausing transmission to the first Ethernet switch of Ethernet frames that are associated with priority levels that are lower than the identified priority level and allowing transmission to the first Ethernet switch of Ethernet frames that are at or above the identified priority level.

Conclusion

Applicant respectfully submits that the rejections have been overcome by the amendment and remark, and that the claims as amended are now in condition for allowance. Accordingly, Applicant respectfully requests the rejections be withdrawn and the claims as amended be allowed.

Invitation for a Telephone Interview

The Examiner is requested to call the undersigned at (503) 439-8778 if there remains any issue with allowance of the case.

Request for an Extension of Time if Needed

The Applicant respectfully petitions for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. §1.136(a) should one be needed. Please charge any fee to our Deposit Account No. 02-2666.

Charge our Deposit Account

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: August 27, 2008

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